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四川峨眉山兰科新植物*

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SEVEN NEW SPECIES OF ORCHIDACEAE FROM EMEI SHAN, SICHUAN

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1. **峨眉手参** 新种 图1

Gymnadenia emeiensis K. Y. Lang, sp. nov.

Species *G. bicorni* Tang, Wang et Lang similis, sed floribus albis, sepalis lateralibus oblique ellipticis, labello late ovato-cordato, calcare ad apicem paulo attenuato et obtuso differt; etiam habitu *G. orchidi.* Lindl. similis, sed floribus albis, labello fere indiviso, calcare longitudine 1/2 ovarii partes aequante differt.

Herba terrestris, 30—50 cm alta. Tuber carnosum bilobum, basi radicatum, lobis longe 2—3-dactylis. Caulis erectus vel suberectus, teres, inferne vaginis 3—4 tectus. Folia 5—6 alternata, anguste elliptica vel oblongo-lanceolata, 9—11 cm longa, 2—3 cm lata, apice subobtusa vel acuminata, basi attenuata vaginifera caulem amplectentia. Racemus pluriflorus, cylindricus, 6—7 cm longus, 1.5 cm diam.; bracteis ovato-lanceolatis, longe acuminatis, inferioribus flores superantibus; floribus albis, densis; sepalo intermedio ovato, 3 mm longo, 2 mm lato, apice obtuso, 3-nervi, paulo curvato, lateralibus patentibus oblique ellipticis obtusis c. 4 mm longis, 2 mm latis, 3-nervibus; petalis obiquis, late rhombico-ovatis, obtusis, margine anteriore paulo dilatatis,cum sepalo intermedio in galeam conniventis, 2-nervibus, nervo anteriore ramoso; labello circuitu late ovato-cordato, fere indiviso, apice acuminato reflexo, basi calcarato, calcare cylindraceo dependente ovario pedicellato breviore, 4—5 mm longo apice paulo attenuato obtuso; gynostemio crasso, brevi, 1.5 mm longo; antherae loculis subparallelis; pollinia 2, obovata, grosse granulosa, caudicula brevi, glandula lanceolata nuda; staminodia minuta; processibus stigmatis 2, cuneatis; ovario fusiformi, torto, glabro, 8—9 mm longo, apice convexo.

Sichuan: Emei Shan (Wanfoding), alt. 3100m, 28. VI. 1980, leg. K. Y. Lang, B. S. Gao et G. H. Yang 003 (Typus Pe[1]).

四川: 峨眉山(万佛顶),生于灌丛草地,海拔3100米,1980年6月28日,郎楷永、高宝莼、杨光辉003(模式标本存中国科学院植物研究所)。

* 本文承高宝莼、杨光辉、邢公侠等同志一起在野外采集协助,在此一并致谢。

1) Pe = Herb. Inst. Bot. Acad. Sin.

本种与角距手参 G. bicornis Tang, Wang et Lang 相近，不同点在于本种的花白色，侧萼片斜椭圆形，唇瓣宽的卵状心形，距的末端渐狭、钝；在外貌上本种与西南手参 G. orchidis Lindl. 也相近，但本种的花为白色，唇瓣几乎不裂，距长为子房的 1/2，则与后种不同。

2. **峨眉开唇兰**　金线盆　新种　图 2

Anoectochilus emeiensis　K. Y. Lang, sp. nov.

Habitu *A. roxburghii* (Wall.) Lindl. proximus, a quo flore foetido, ungue labelli in quoque latere lamina ampla oblonga ornata, margine laminae laxe obtuse dentato vel breviter fimbriato, calcare apice bifido recedit.

Herba terrestris, 21 cm alta. Rhizoma repens, cauliforme, radicatum. Caulis teres, carnosus, nodosus, superne foliatus. Folia 3, ovata, 3.5 cm longa, 3—3.2 cm lata, discolora, subtus purpurea, supra atro-viridia et nervis xanthinis ornata, apice acuta, basi subrotundata petiolata; petiolo c. 1 cm longo, basi in vaginam amplexicaulem ampliato. Scapus gracilis, pallide purpureus, pubescens; racemo 3-floro; bracteis lanceolatis, acuminatis, pallide purpureis, subtus laxe pubescentibus, ovariis brevioribus; floribus foetidis; petalis sepalisque purpurello-albis 7 mm longis apice acutis 1-nervibus, labello albo, sepalo intermedio ovato-elliptico, medio 2 mm lato, cum petalis in galeam

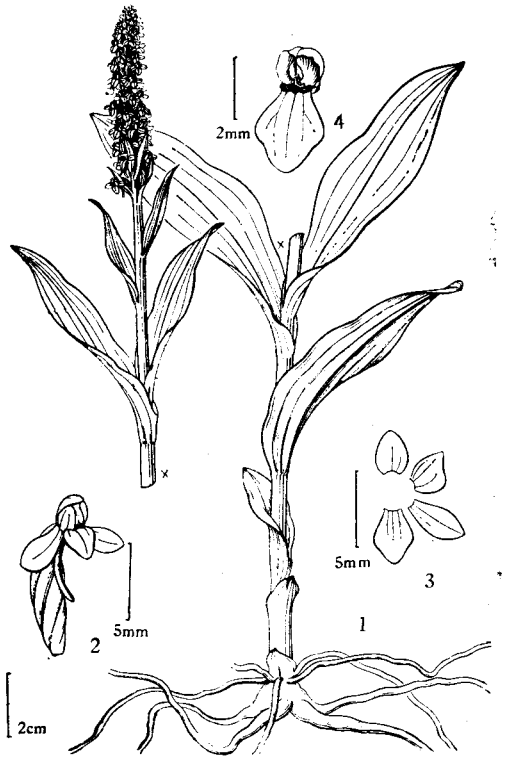

图 1　**峨眉手参 Gymnadenia emeiensis** K. Y. Lang
1.全株；2.花；3.花被片各部；4.蕊柱与唇瓣。〈张泰利绘〉

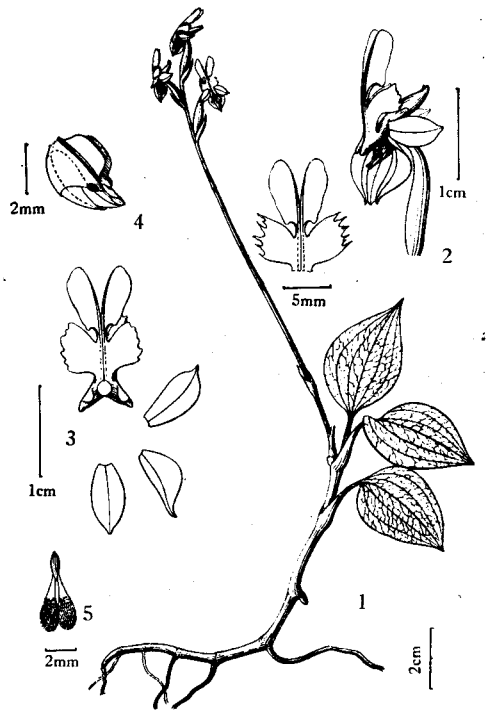

图 2　**峨眉开唇兰 Anoectochilus emeiensis** K. Y. Lang
1.全株；2.花；3.花被片各部；4.蕊柱；5.花粉块。〈张泰利绘〉

agglutinato, lateralibus patentibus obovato-lanceolatis 3.2 mm latis; petalis oblique semicordatis, medio 3 mm latis; labello circuitu subovato 13 mm longo, medio unguiculato, e parte superiore bilobo, lobis suboblongis 5 mm longis, c 2 mm latis, apice obtusis, ungue in quoque latere lamina ampla oblonga ornato, margine laminae laxe obtuse dentato vel breviter fimbriato; calcare conico, c. 6 mm longo, ascendente, apice bifido, intus callis subcunciformibus instructo; gynostemio crasso brevi, 5.5 mm longo, sub stigmatibus lamellis duabus latis oblongis parallelis ornato; anthera obovato-lanceolata, c. 5 mm longa; pollinia obovato-lanceolata, 3.5 mm longa, caudicula brevi, glandula magna sublanceolata 2 mm longa; rostello erecto apice retuso; stigmatibus 2, lateralibus; ovario fusiformi torto pubescenti, cum pedicello 13 mm longo.

Sichuan: Emei Shan (Hongchunping), alt. 900 m, 3. IX. 1963, leg. G. H. Shing et K. Y. Lang 1243 (Typus Pe); ibidem, 13. VIII. 1938, leg. T. Y. Cheo et K. C. Tsu 151.

四川：峨眉山(洪椿坪)，海拔 900 米，1963 年 9 月 3 日，邢公侠、郎楷永 1243（模式标本存中国科学院植物研究所)；同地，1938 年 8 月 13 日，周太炎、徐国钧 151。

本种近于花叶开唇兰 A. roxburghii (Wall.) Lindl.，但以其花具腥臭味；唇瓣爪每侧具宽大的、矩圆形的片，片的边缘具疏的钝齿或短流苏；距的末端 2 裂而有区别。

3. **峨眉竹茎兰** 新种 图 3

Tropidia emeishanica K. Y. Lang, sp. nov.

Species proxima *T. calcaratae* Ames, sed bracteis ovato-lanceolatis, sepalo intermedio oblongo 5.5 mm longo, sepalis lateralibus in synsepalum unum apice truncatum omnino connatis, petalis ellipticis sepalis brevioribus, labello obovato concavo intus carina una longitudinali ornato, basi ecalcarato distincta.

Herba terrestris, 22 cm alta, Rhizoma crassiusculum, radices elongatas edens. Caulis erectus, teres, rigidulus, glaber, nodosus, vaginis multis cylindraceis tectus, parce ramiger, ramis apice 1-foliatis. Folia ovata vel ovato-lanceolata, 7—10 cm longa, 3—4 cm lata apice acuminata, basi suborbiculata, utraque facie glabra, brevipetiolata, petiolo C. 1 cm longo. Racemus terminalis 13-florus; floribus minoribus densis viridibus; bracteis ovato-lanceolatis, 3 mm longis, longitudine 1/3 ovarii partes aequantibus; sepalo intermedio oblongo, 5.5 mm longo, 1.8 mm lato, concavo, apice obtuso, 3-nervi, sepalis lateralibus in synsepalum unum omnino connatis, synsepalo subovato-lanceolato C. 6 mm longo, 2.3 mm lato, concavo, apice truncato, 2-nervi; petalis ellipticis, concavis, 5 mm longis, 1.6 mm latis, apice obtusis, 3-nervibus; labello obovato, 3 mm longo, 2 mm lato, concavo, intus carina una longitudinali ornato, apice obtuso reflexo et papillulato, basi ecalcarato; gynostemio crasso, brevi, 2 mm longo, 1.5 mm lato; anthera erecta, cordata, attenuata, obtusa; pollinia obovata, granulosa caudicula brevi, glandula suborbiculata; rostello erecto bifido; stigmate 1 suborbiculato; ovario cylindrico-fusiformi, torto, glabro, cum pedicello 12 mm longo.

Sichuan: Emei Shan (Hongchunping), alt. 1150 m., 9. VII. 1980, leg. K. Y. Lang, B. S. Gao et G. H. Yang 036 (Typus Pe).

四川：峨眉山(洪椿坪)，生于右侧山坡林下，海拔 1150 米，1980 年 7 月 9 日，郎楷永、高宝莼、杨光辉 036（模式标本存中国科学院植物研究所)。

本种近于 T. calcarata Ames，区别点在于本种的苞片卵状披针形；中萼片矩圆形，长

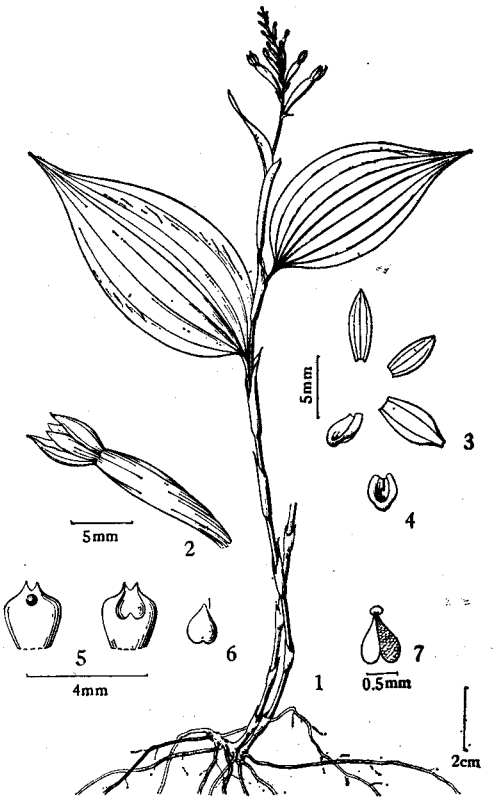

图 3　**峨眉竹茎兰 Tropidia emeishanica**
K. Y. Lang
1.全株；2.花；3.花被片各部；4.唇瓣正面；
5.蕊柱正面与背面；6.花药背面。〈张泰利绘〉

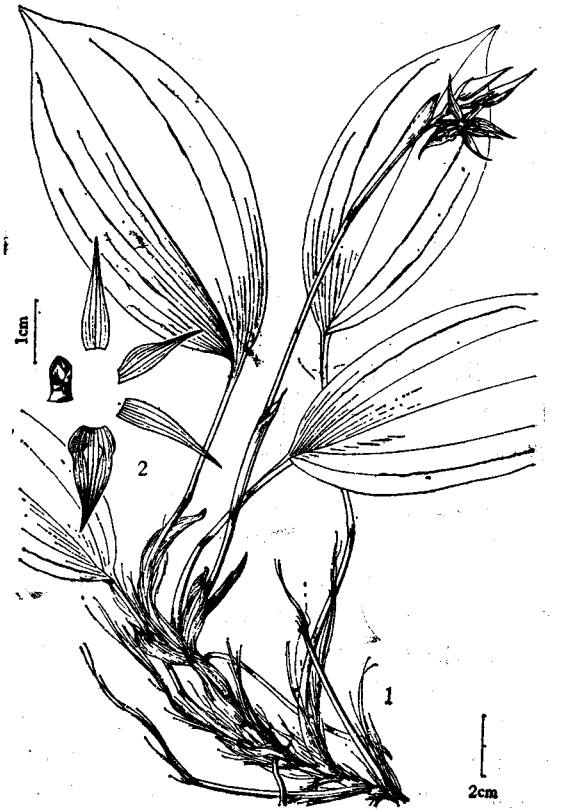

图 4　**峨眉球柄兰 Mischobulum emeiensis**
K. Y. Lang
1.全株；2.花被片各部与蕊柱。〈冯晋庸绘〉

5.5 毫米；侧萼片完全合生成 1 枚先端截平的合萼片；花瓣椭圆形，较萼片短；唇瓣倒卵形，凹陷，内面具 1 条纵的脊状突起，基部无距。

4. **峨眉球柄兰**　新种　图 4

Mischobulbum emeiensis K. Y. Lang, sp. nov.

Species *M. macrantho* (Hook. f.) Rolfe similis, sed follis basi subrotundatis, inflorescentia 3-flora inferne bractea vaginiformi una magna ornata, floribus minoribus, petalis ovato-lanceolatis, mento minore 3 mm longo, labello ovato-lanceolato fere indiviso differt.

Herba terrestris, 23 cm alta. Rhizoma subrepens, radices elongatas edens. Pseudobulbi anguste teretes carnosi, 4.5—8 cm longi, 3—5 mm diam., apice unifolii. Folia elliptica, 12.5—14 cm longa, 4.5—6 cm lata, apice subito angustata et acuminata, basi subrotundata utraque facie glabra, longipetiolata; petiolo 4—4.5 cm longo. Scapus lateralis, folia subaequans; racemo terminali 3-floro, infra inflorescentiam bractea vaginiformi una magna oblanceolata apice acuta c. 5 cm longa supra 1.2 cm lata ornato; floribus purpureo-brunneis; bracteis lanceolatis, 1.5 cm longis, apice longe acuminatis, ovariis longioribus; sepalis aequimagnis lanceolatis, c. 2 cm longis, 4 mm latis, apice longe acuminatis, 5-nervibus; petalis ovato-lanceolatis 1.7 cm longis, 6 mm latis, apice

acuminatis, 5-nervibus; mento minore 3 mm longo; labello ovato-lanceolato, fere indivi so, 1.8 cm longo, 8 mm lato, intus prope basin lamellis duabus triangularibus et in nervis anticis is nonnullis angustis ornato, apice acuminato; gynostemio crasso, brevi, 4 mm longo; anthera late ovata, 4 mm longa; rostello conspicuo ovato acuto; processu stigmatis elliptico; ovario gracili torto glabro c. 6 mm longo.

Sichuan: Emei Shan (Hongchunping), alt. 850 m., 6. VII. 1980, leg. K. Y. Lang, B. S. Gao et G. H. Yang 023 (Typus Pe).

四川: 峨眉山(洪椿坪),生于山坡林下,海拔 850 米, 1980 年 7 月 6 日,郎楷永、高宝莼、杨光辉 023 (模式标本存中国科学院植物研究所)。

本种与大花球柄兰 M. macranthum (Hook. f.) Rolfe 相近, 不同点在于其叶基部近圆形;花序具 3 朵花,下面具 1 枚大的鞘状苞片;花较小,花瓣卵状披针形;萼囊小,长 3 毫米;唇瓣卵状披针形,几乎不裂。

5. **峨眉虾脊兰** 新种 图 5

Calanthe emeishanica K. Y. Lang et Z. H. Tsi, sp. nov.

Species proxima *C. tricarinatae* Lindl., sed petalis linearibus, labello calcarato, calcare 2—3 mm longo distincta.

Herba terrestris, 25 cm alta. Caulis brevissimus. Folia 3—4 basalia elliptica vel oblonga, 8—11 cm longa, 2.5—3.5 mm lata, apice acuminata vel subobtusa, basi attenuata, breviter petiolata. Scapus terminalis, e fasciculo folii oriundus, 24 cm altus; racemo parum laxifloro, rhachi puberula; bracteis ovato-lanceolatis, c. 1 cm longis, pedicellis (cum ovariis) brevioribus; petalis sepalisque luteolis; sepalis ovato-lanceolatis subaequalibus, patentibus, 1.7 cm longis, c. 5 mm latis, apice acuminatis, sepalo intermedio 5-nervi, lateralibus obliquis, 3—5-nervibus; petalis linearibus, 1.3 cm longis, c. 2 mm latis, apice acuminatis, 2—3-nervibus; nervis sepalorum petalorumque totis purpureis; labello albo trilobo, lobis lateralibus oblique ellipticis patentibus eo intermedio minoribus apice obtusis, margine paulo laxidentatis, lobo intermedio subreniformi vel semiorbiculari, supra lamellis 7 (3 longioribus, 4 brevioribus) crenulatis ornato, apice subtruncato et obtuso, margine polytycho et undulato; calcare brevi cylindraceo recto, 2—3 mm longo, apice obtuso, prope apicem laxe puberulo; gynostemio crasso brevi, 5 mm longo; clinadrio amplo; anthera subcordata; pollinia 8, in quoque loculo 4, cerea; rostello conspicuo bilobo, lobis triangulis; ovario lineari paulo arcuato puberulo torto, cum pedicello 13 mm longo.

Sichuan: Emei Shan (Huayanding), alt. c. 2000 m, 2. VII. 1980, leg. K. Y. Lang, B. S. Gao et G. H. Yang 012 (Typus Pe).

四川: 峨眉山(华严顶),生于山坡阔叶林下,海拔约 2000 米, 1980 年 7 月 2 日,郎楷永、高宝莼、杨光辉 012 (模式标本存中国科学院植物研究所)。

本种与三棱虾脊兰 C. tricarinata Lindl. 相近,不同点在于花瓣条形;唇瓣具距,距长 2—3 毫米。

6. **反唇舌唇兰** 新种 图 6

Platanthera deflexilabella K. Y. Lang, sp. nov.

Species *P. minori* (Miq.) Rchb. f. similis, sed floribus minoribus; sepalo intermdio ovato-oblongo, lateralibus oblique lineari-lanceolatis, margine sepalorum anteriore ciliifor-

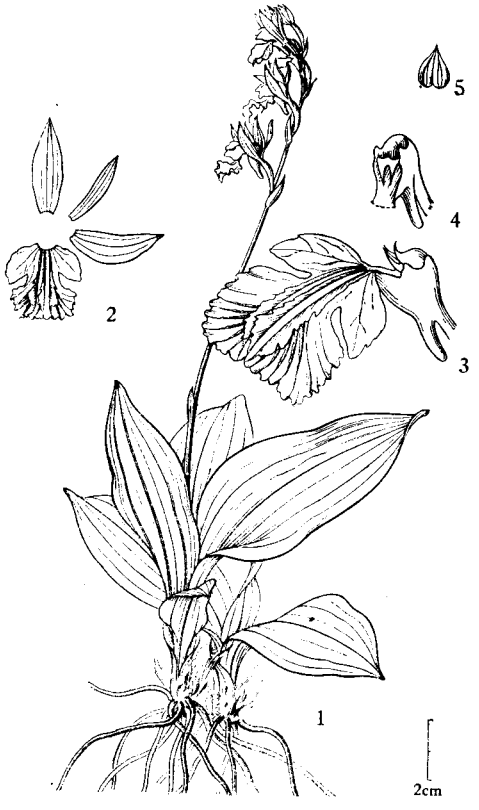

图 5　**峨眉虾脊兰 Calanthe emeishanica**
K.Y. Lang
1.全株；2.花被片各部；3.蕊柱与唇瓣；4.蕊柱与距；5.花药正面。〈张泰利绘〉

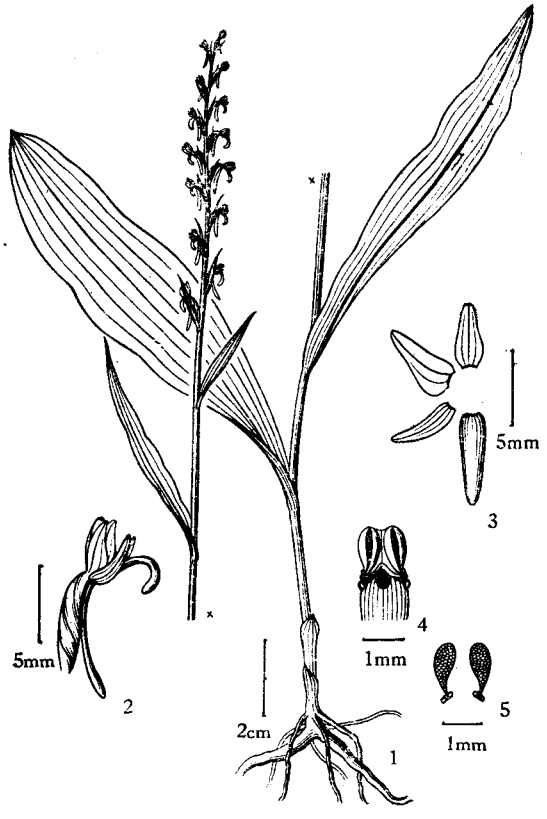

图 6　**反唇舌唇兰 Platanthera deflexilabella**
K. Y. Lang
1.全株；2.花；3.花被片各部；4.蕊柱；5.花粉块。〈张泰利绘〉

mi-denticulato; petalis oblique deltoideo-ovatis sepalis latioribus; labello deflexo differt.

Herba terrestris, 30—47 cm alta. Rhizoma stoloniforme; tuber stoloniforme horizontale, apice radicans. Caulis erectus vel suberectus, teres, prope basin vaginis 2 instructus, supra vaginas foliatus. Folia 2—3 alternata, elliptica vel anguste elliptica vel anguste oblonga, 9—15 cm longa, 1.5—5 cm lata, apice subobtusa vel acuminata, basi attenuata caulem amplectentia. Racemus pluriflorus, cylindricus, 6.5—12 cm longus; bracteis anguste lanceolatis, longe acuminatis, margine denticulatis, inferioribus flores superantibus; floribus pallide flavo-virentibus, minoribus, odoratis; sepalo intermedio erecto ovato-oblongo, 4 mm longo, 1.8 mm lato, apice obtuso, 3-nervi; lateralibus patentibus oblique lineari-lanceolatis, 4.5 mm longis, 1.2 mm latis, apice obtusis 3-nervibus, margine sepalorum anteriore ciliiformi-denticulato; petalis erectis, oblique deltoideo-ovatis, 5 mm longis, 2 mm latis, cum sepalo intermedio conniventibus, 2-nervibus; labello ligulato-lineari, carnoso, 6 mm longo, 1.5 mm lato, apice obtuso, medio curvato reflexo, basi calcarato, calcare dependente cylindraceo gracili, 7—8 mm longo ovario cum pedicello longiore, apice paulo attenuato obtuso; gynostemio crasso, brevi, 1.5 mm longo; antherae loculis subparallelis; pollinia 2 obovata grosse granulosa, caudicula brevi, glandula elliptica margine paulo revoluta; staminodiis minutis; processibus stigmaticis 2 clavatis sub rostello projectis; ovario cylindrico-fusiformi contorto glabro cum pedicello 5—6

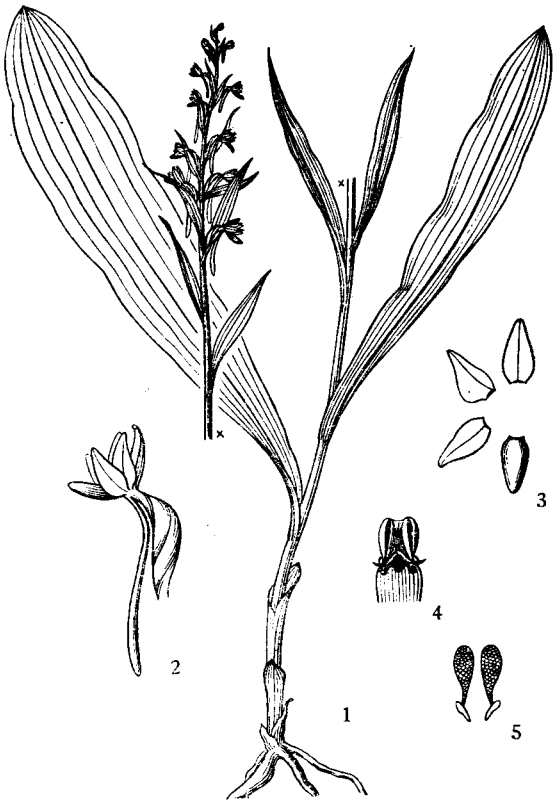

图 7 **长粘盘舌唇兰 Platanthera longiglandula** K. Y. Lang
1.全株； 2.花； 3.花被片各部； 4.蕊柱； 5.花粉块。〈张泰利绘〉

mm longo paulo curvato.

Sichuan: Emei Shan (inter Leidongping et Baiyunsi), alt. 2500—2550 m, 30. VII. 1952, leg. X. L. Jiang, S. S. Chang et J. H. Xiong 31833 (Typus in Pe).

四川：峨眉山（在雷洞坪和白云寺之间），生于路旁，海拔 2500—2550 米，1952 年 7 月 30 日，蒋兴麐、张秀实和熊济华 31833（模式标本存中国科学院植物研究所标本室）。

本种与小舌唇兰 P. minor (Miq.) Rchb. f. 相近，不同点在于本种花较小；中萼片卵状矩圆形，侧萼片斜的条状披针形，萼片的前部边缘具纤毛状细锯齿；花瓣斜的三角状卵形，较萼片宽；唇瓣反曲颇易区别。

7. **长粘盘舌唇兰** 新种 图 7

Platanthera longiglandula K. Y. Lang, sp. nov.

Affinis *P. mandarinorum* Rchb. f., sed labello ligulato-ovato brevi-erecto, 3.5 mm longo; sepalis ovatis, margine ciliiformi-denticulatis; glandulis anguste lanceolatis differt.

Herba terrestris, 28—33 cm alta. Rhizoma stoloniforme; tuber stoloniforme horizontale, apice radicans. Caulis erectus vel suberectus, prope basin vaginis 2—4 instructus, supra vaginas foliatus. Folia 4—5, inferiora 2 majora, anguste oblonga vel anguste lanceolata vel spathulata, 12—17 cm longa, 1.5—3 cm lata, apice obtusa vel acuta, basi

attenuata caulem amplectentia, Racemus multiflorus, cylindricus, c. 8 cm longus; bracteis lanceolatis apice acuminatis, margine denticulatis, inferioribus flores superantibus; floribus flavo-virentibus odoratis; sepalis ovatis 4 mm longis, apice obtusis, margine ciliiformi-denticulatis 1-nervibus, sepalo intermedio 2.2 mm lato, iis lateralibus patentibus paulo obliquis 2 mm latis; petalis oblique ovatis, 3.5 mm longis, 2 mm latis, margine anteriore paulo dilatatis, apice obtusiusculis, 1-nervibus, cum sepalo intermedio conniventibus; labello ligulato-ovato carnoso erecto, 3.5 mm longo, 1.6 mm lato, apice obtuso, basi calcarato, calcare dependente gracili cylindraceo 10—12 mm longo ovario cum pedicellato longiore apice obtuso; gynostemio crasso brevi c. 1.5 mm longo; antherae loculis parallelis; pollinia 2 obovata grosse granulosa, caudicula brevi, glandula anguste lanceolata nuda; staminodiis minutis; processibus stigmaticis 2 clavatis, sub rostello projectis, apice obtusis; ovario fusiformi contorto glabro, cum pedicello 6—7 mm longo, curvato.

Sichuan: Emei Shan (Sheshenyan), 4. VII. 1952, leg. X. L. Jiang, S. S. Chang et J. H. Xiong 71474 (Typus Pe).

四川：峨眉山（舍身岩），生于竹坡上，1952 年 7 月 4 日，蒋兴麐、张秀实和熊济华 71474（模式标本存中国科学院植物研究所标本室）。

本种与尾瓣舌唇兰 P. mandarinorum Rchb. f. 相近，不同点在于其唇瓣舌状卵形，短而直，长 3.5 毫米；萼片卵形，边缘具纤毛状细锯齿；粘盘狭披针形颇易识区。